

assume that claim 44 depends from independent claim 51 since claim 44 is similar to claim 52, which depends from claim 51.”

Applicant disagrees that claim 44 depends from a canceled claim. In the Amendment filed May 21, 2001, claim 44 was amended to depend from claim 60. (See page 6, lines 3-4 and page 7, lines 8-9 of the May 21, 2001 Amendment). Claim 60 is still pending. The Office Action therefore erroneously indicates that claim 44 depends on a canceled claim. The assumption in the Office Action that claim 44 depends from claim 51 is therefore erroneous. Applicant respectfully solicits examination of claim 44 in its correct state.

Rejections Under 35 U.S.C. §102 and §103:

Claims 45-48, 50 and 53-60 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Wrabetz et al (U.S. '791, hereinafter “Wrabetz”) in view of Parad (U.S. '570). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Applicant respectfully submits that the combination of Wrabetz and Parad fails to teach or suggest all of the claimed limitations. For example, Applicant submits that the combination fails to teach or suggest “identifying component

processes for use in provisioning the requested service” and “establishing conditions applicable to provision of those component processes,” as required by independent claim 45 and claim 48 which depends therefrom.

The Office Action alleges that the claimed feature “establishing conditions applicable to provision of those component processes” is disclosed by the “constraining expressions” discussed in col. 14, lines 51-53 of Wrabetz. Applicant respectfully disagrees. The “constraining expression” disclosed in col. 14, lines 51-53 of Wrabetz is provided in a resource query. The constraining expressions in resource query 32 identify the constraints which the property values of a resource must match to be a qualifying resource for satisfying the query. The constraining expression provided in resource query 32 therefore concerns stipulations imposed by the requestor of the service. The constraining expression is therefore a condition used in deciding which processor should carry out the requested task (i.e., it is a condition applicable to the allocation of that task), not a condition applicable to provision of a component process as required by claim 45. This highlights a fundamental difference between the invention disclosed in claim 45 and Wrabetz. In the invention required by claim 45, resources are essentially represented by autonomous agents which can put conditions on the provision of a service. In Wrabetz, the resources merely do as they are commanded. That is, the resources in Wrabetz carry out a request unconditionally. Col. 7, lines 55-58 et seq. (cited by the Examiner) states that “...The remote service routine receives a resource request from the remote execution interface...and performs the remote

service in response to the resource request.” This passage of Wrabetz clearly indicates that the remote request is performed unconditionally. Wrabetz therefore fails to disclose establishing conditions applicable to provision of the identified component processes as required by claim 45.

Parad fails to remedy the above deficiency of Wrabetz. Also, the Office Action improperly mixes separate sections of Parad. Figs. 1 and 2 of Parad show that the system disclosed in Parad has two distinct components labeled “Action Control” and “Resource Engines.” It is clear from the headings in Parad that col. 12, line 66 to col. 27, line 43 concern “Resource Engines” components whereas col. 27, line 43 et seq. concerns “Action Control” components. The Office Action intermixes the two discussions. This intermixing makes no sense as each component will have its own distinct variable associated with it.

Applicant further submits that one of ordinary skill in the art would not have been motivated to combine the teachings of Parad and Wrabetz. Wrabetz has no interest whatsoever in forming prospective schedules. Wrabetz is primarily concerned with performing a massive computational task quickly through use of a distributed computer. Wrabetz’s interest in speed is clearly evident in that Wrabetz discloses seeking a faster way to use a distributed computer (see, e.g., col. 12, lines 8-9). In marked contrast, Parad deals with the management of machine or human resources to form prospective schedules. These machine or human resources operate much more slowly than data processors. If flow resources are not managed carefully, backlogs of several days may occur. To

introduce a delay sufficiently long to make prospective scheduling worthwhile runs counter to the use of a distributed computer. The solution to a task taking too long in a distributed computer is to add more processes to that computer, not to carefully allocate its time over a period of days. Applicant therefore respectfully submits that one of ordinary skill in the art would not have been motivated to combine the teachings of Parad and Wrabetz.

The Office Action apparently alleges that Fig. 5b (discussed in col. 14, lines 37-42 of Wrabetz) discloses the claimed limitation “identifying component processes for use in provisioning the requested service.” (See page 3, lines 8-10 of the Office Action). Applicant respectfully disagrees. Fig. 5b merely discloses the format for storing details about a particular computer. Accordingly, Applicant respectfully submits that claims 45 and 48 are not “obvious” over Wrabetz and Parad.

Like independent claim 45, independent claim 46 requires “identifying component processes for use in provisioning the requested service” and “establishing conditions applicable to provision of those component processes.” Applicant therefore submits that claim 46 is not “obvious” over Wrabetz and Parad for the reasons discussed above with respect to claim 45.

Claim 46 further requires one or more of the established conditions having an associated expiry time of the one or more conditions itself for storage in a data store. The Office Action alleges that col. 16, lines 48-51 and 53-54 of Parad discloses this claimed feature. (See page 4, lines 6-8 of the Office Action).

Applicant respectfully disagrees with this allegation. The above passage of Parad refers to a notice sent by a resource engine when it calculates, in response to receiving some information from a resource, that a resource conflict will occur. In particular, this passage discusses the time that a notice will be sent. The time that this notice will be sent has nothing whatsoever to do with the expiry time of an established condition. Parad therefore fails to teach or suggest an established condition having an associated expiry time for storage in a data store. As noted by the Office Action, Wrabetz also fails to disclose this feature. Accordingly, even if Wrabetz and Parad were combined as proposed by the Office Action, the combination would not have taught or suggested this additional claimed limitation required by claim 46.

Like independent claim 46, independent claim 47 requires “identifying component processes for use in provisioning the requested service”, “establishing conditions applicable to provision of those component processes” and “wherein one or more of said established conditions has an associated expiry time of the one or more conditions itself for storage in the data store.” Claim 47 is non-obvious under 35 U.S.C. §103 over Wrabetz and Parad for at least the reasons discussed above with respect to claim 46.

Claim 47 further requires “wherein: an expired or undefined condition is detected in the data store, which condition is applicable to a component process for the provision of the requested service, and a substitute condition is established in response to said detection.” Applicant respectfully submits that Wrabetz and

Parad fail to teach or suggest this additional claim limitation. The Office Action apparently alleges that it would have been obvious to one of ordinary skill in the art to combine the teachings of Wrabetz and Parad through “the motivation of showing how updating conditions or rules can be utilized in a resource management environment. However, the netmake program described in Wrabetz specifies conditions for execution of a task. That condition is fixed in order to choose the best processor for the current task. It is instantaneously applied. There is no opportunity to update it nor could there be.

Independent claim 50 requires “programmed computer means for negotiating with another entity, in response to a request from said other entity, to provide a service.” The Office Action alleges that col. 7, lines 55-58 and col. 10, lines 49-53 of Wrabetz discloses this claimed feature. (See page 5, lines 1-4 of the Office Action). Applicant respectfully disagrees. Col. 7, lines 55-58 of Wrabetz states that a remote service routine “receives the remote request...and performs the remote service in response to that request.” As discussed above, the remote request is performed by the remote service routine unconditionally. No negotiation takes place. The remote service routine merely does as it is asked. Col. 10, lines 49-53 of Wrabetz merely refers to alternative hardware architectures of the Wrabetz system. However, none of these alternatives discloses a computer means for negotiating with another entity. A computer processor does not gain the ability to “negotiate” merely because it becomes more powerful. That is, the

capability of performing more operations per second does not itself enable a computer means to negotiate.

The Office Action admits that “Wrabetz et al fails to disclose negotiation means or the negotiation means including a data store.” (See page 5, lines 11-12 of the Office Action). The Office Action alleges, however, that col. 29, lines 49-54 of Parad discloses this feature. Applicant again respectfully disagrees. This cited passage of Parad relates to an “Action Control” component of Parad’s system. Requirements are fed into the “Resource Engines” component of that system from the Enterprise Information Systems (see Fig. 2 of Parad). The “Resource Engine” attempt to create a schedule of activity for the resource they represent which meets the new requirement as well as any outstanding requirements (see item 10 at the end of col. 14 in Parad). If the resource finds that it can not meet the new requirements without breaking rules specified by a user, then it issues a notice to the “Action Control” component associated with that user (see, e.g., col. 28, lines 20-39). It is up to the user on how to deal with that notice. That is, it is up to the user to overcome the resourcing problem that has been identified by Parad’s system.

There is no teaching or suggestion that Parad’s system can respond to the Enterprise Information Systems which feed requirements into it. Clearly, an ability to respond to such a request is a component of negotiating the conditions applied to a response to that request.

Claim 53 and claims 54-58 which depend therefrom require “negotiation means for use in establishing conditions applicable to provision of those component processes.” Applicant submits that Wrabetz and Parad fail to teach or suggest this claimed feature. Negotiation is a feature which reflects the autonomy exhibited by the service provision system of the claimed invention. The Office Action admits that Wrabetz fails to disclose this claimed feature. (See page 4, lines 3-5 of the Office Action). Applicant submits that Parad fails to remedy this deficiency of Wrabetz. The concept of resource or its agent specifying conditions on the provision of a service is not taught or suggested by Wrabetz or Parad. Col. 29, lines 56-61 of Parad (identified in the Office Action) apparently discusses the building up of a table used by the “Action Control” component of the Parad system to carry out a procedure which would be selected by a user in response to a significant change in the action list. This has nothing to do with a “Resource Engine” and nothing to do therefore with negotiating conditions applicable to the provision of a service.

Independent claim 59 requires “using a programmed computer to negotiate with another entity, in response to a request from said other entity, to provide a service.” Applicant therefore submits that claim 59 is non-obvious over Wrabetz and Parad for the reasons discussed above with respect to claim 50.

Independent claim 60 and claim 44 which depends therefrom requires, inter alia, “determining whether to provide a service, to proposed conditions under which the system is willing to provide a service or to decline to provide a service.”

Wrabetz fails to teach or suggest this feature. That is, Wrabetz fails to even contemplate a resource providing a conditional response to request to carry out a service. The system of Wrabetz merely carries out the service when instructed to do so as evident by col. 7, lines 55-58 (discussed above) of Wrabetz. Also, Wrabetz fails to teach or suggest instances of a method running on a single processor. Instead, each processor carries out one task at a time.

There is thus no teaching in Wrabetz that each instance of a method might have its own data associated with it. Wrabetz therefore fails to teach or suggest "each of said instances having processing and assessing stored parameters in an up-dateable data store in respect of each of its associated plurality of organizations so as to provide a virtual organization." Fig. 10 may disclose a plurality of workgroups, but each computer provides one remote execution service at a time, rather than providing a plurality of remote execution services for a corresponding plurality of work groups at a given time.

Parad fails to remedy any of these above deficiencies of Wrabetz. Also, as discussed in connection with claim 45, the Office Action's discussion of Parad improperly intermixes separate sections of that document referring to the distinct components "Action Controls" and "Resource Engines."

Accordingly, Applicant respectfully submits that claims 45-48, 50 and 53-60 are not "obvious" over Wrabetz and Parad and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Claim 51 was rejected under 35 U.S.C. §102(c) as allegedly being anticipated by Wrabetz. Applicant respectfully traverses this rejection. For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference. Applicant respectfully submits that Wrabetz fails to disclose each and every element required by claim 51. In particular, Applicant respectfully submits that Wrabetz fails to disclose “processing means...adapted to decide, based at least in part on data held in an updatable data store, whether to provide a service, to propose conditions under which the system is willing to provide a service or to decline to provide a service.” As discussed above, the resources disclosed in Wrabetz perform a request unconditionally. They merely do as they are commanded. Again, see col. 7, lines 55-58 of Wrabetz. Wrabetz fails to therefore disclose the above claimed feature. Applicant therefore respectfully requests that the rejection of claim 51 under 35 U.S.C. §102 be withdrawn.

Claims 44 and 52 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Wrabetz in view of Babayev et al (U.S. ‘121, hereinafter “Babayev”). Applicant respectfully traverses this rejection. Claim 44 was examined upon an erroneous assumption. That is, claim 44 depends from claim 60, not claim 51 as assumed in the Office Action.

Claim 52 depends from claim 51. Accordingly, the comments made above with respect to Wrabetz and claim 51 apply equally to claim 52. Babayev fails to

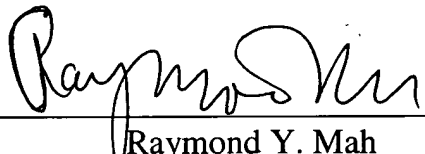
remedy the above deficiencies of Wrabetz. Applicant therefore respectfully submits that claim 52 is not "obvious" over Wrabetz and Babayev.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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